

New Evidence on the Puzzles: Results from Agnostic Identification on Monetary Policy and Exchange Rates*

Almuth Scholl
University of Frankfurt
and Harald Uhlig
Humboldt-Universität zu Berlin
Deutsche Bundesbank, CenterER and CEPR

This revision: May 15, 2006

*Address: Humboldt-Universität zu Berlin, Wirtschaftswissenschaftliche Fakultät, Spandauer Str. 1, 10178 Berlin, GERMANY. e-mail: ascholl@wiwi.uni-frankfurt.de, uhlig@wiwi.hu-berlin.de, fax: +49-30-2093 5934, home page <http://www.wiwi.hu-berlin.de/wpol/>. This research was supported by the Deutsche Forschungsgemeinschaft through the SFB 649 “Economic Risk” and by the RTN network MAPMU. We are grateful to comments received at MIT and at the “Macroeconomics and Reality: 25 years later” conference in Barcelona, April 2005.

Abstract

Past empirical research on monetary policy in open economies has found evidence of the 'delayed overshooting', the 'forward discount' and the 'exchange rate' puzzles. We revisit the effects of monetary policy on exchange rates by applying Uhlig's (2005) identification procedure that involves sign restrictions on the impulse responses of selected variables. We avoid the "price puzzle" by construction and impose no restrictions on the exchange rate to leave the key question agnostically open. We find that the puzzles regarding the exchange rates are still there, but that the quantitative features are different. In response to US monetary policy shocks, the peak appreciation happens during the first two years after the shock for the US-German and the US-UK pair, and during the first year for the US-Japan pair. There is a robust forward discount puzzle implying a large risk premium. We study this issue by calculating conditional Sharpe ratios. For foreign monetary policy shocks, we find considerable uncertainty regarding the initial reaction of the exchange rate. Quantitatively, monetary policy shocks seem to have a minor impact on exchange rate fluctuations.

Keywords: vector autoregressions, agnostic identification, forward discount puzzle, delayed overshooting, exchange rate puzzle, exchange rates, monetary policy

JEL codes: C32, E58, F31, F42